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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,284	12/03/2003	J. Scott Price	GEMS 0136 PUS	1283

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EXAMINER	
KAO, CHIH CHENG G	

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,284	PRICE ET AL.	
	Examiner	Art Unit	
	Chih-Cheng Glen Kao	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-10 and 12-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-10 and 12-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Applicants stated that corrected drawing sheets were submitted with the Amendment filed 5/18/05. However, these corrected drawings sheets were not found.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (paragraphs 24, 26, and 29, electron beam "40"), (paragraph 36, line 1, "step 100"), (paragraph 37, line 1, "step 102"), (paragraph 38, line 1, "step 104"), (paragraph 39, line 1, "step 106"), and (paragraph 40, line 1, "step 108"). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 12-16 and 20 are objected to because of the following informalities, which appear to be minor draft errors including lack of antecedent basis problems.

In the following format (location of objection; suggestion for correction), the following corrections may obviate their respective objections: (claim 12, line 1, "A system as in claim 10"; replacing "A system" with - -An imaging tube- -), (claim 13, line 1, "A system as in claim 10"; replacing "A system" with - -An imaging tube- -), (claim 13, line 4, "said low-pressured cavity"; replacing "pressured" with - -pressure- -), (claim 13, line 7, "said low-pressured cavity"; replacing "pressured" with - -pressure- -), (claim 14, line 1, "A system as in claim 10"; replacing "A system" with - -An imaging tube- -), (claim 15, line 1, "A system as in claim 10"; replacing "A system" with - -An imaging tube- -), (claim 16, line 1, "A system as in claim 10"; replacing "A system" with - -An imaging tube- -), and (claim 20, line 2, "said low-pressured gas"; replacing "pressured" with - -pressure- -).

For purposes of examination, the claims have been treated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, 6, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (US Patent 5517545) in view of Barrett (US Patent 6674838).

5. Regarding claim 1, Nakamura et al. discloses an apparatus comprising a source housing (fig. 5, section from #11 to #12) comprising a source window (fig. 5, #12), which is a metal that would necessarily have a first voltage potential (col. 3, line 40), a source electrode having a second voltage potential (fig. 5, #15a-15d) and generating electrons (col. 3, lines 53-54), said source electrode emitting said electrons through said source window to a target (fig. 5, #16a) external to said source housing.

However, Nakamura et al. does not disclose a source window forming a sealed structure with a source housing and wherein said source window comprises feedthroughs for a coolant to flow therein and absorb heat from said source window.

Barrett teaches a source window (fig. 1, #58) forming a sealed structure (col. 5, lines 62-67) with a source housing (fig. 1, housing of #50) and wherein said source window (fig. 1, #58) comprises feedthroughs (fig. 1, #68) for a coolant (col. 9, line 23) to flow therein and absorb heat from said source window (fig. 1, #58).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Nakamura et al. with the window and coolant of Barrett, since one would be motivated to make such a modification to better cool the tube at specific locations compared to indirect cooling systems (col. 3, lines 62-66) as implied from Barrett for reducing thermal damage.

6. Regarding claim 2, Nakamura et al. as modified above suggests an apparatus as recited above.

However, Nakamura et al. does not disclose a coolant channel housing thermally coupled to and at least partially defined by a source housing comprising a coolant channel and a coolant flowing therein, said coolant absorbing heat from the source housing.

Barrett teaches a coolant channel housing (fig. 1, #68) thermally coupled (fig. 1, #64) to and at least partially defined by a source housing (fig. 1, #66) comprising a coolant channel (fig. 1, #68) and a coolant flowing (col. 9, line 23) therein, said coolant absorbing heat from the source housing (fig. 1, #64 and 68).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further incorporate the apparatus of Nakamura et al. with the coolant of Barrett, since one would be motivated to make such a modification to better cool the tube at specific locations compared to indirect cooling systems (col. 3, lines 62-66) as implied from Barrett for reducing thermal damage.

7. Regarding claim 4, Nakamura et al. would necessarily have a source window (fig. 5, #12) allowing direct electron emission to pass through said source window to said target (fig. 5, #16a) and preventing indirect electron emission from passing through said source window (fig. 5, #12), since indirect electron emissions will have less kinetic energy and will not pass through the source window as easily compared to direct electron emissions having more kinetic energy.

8. Regarding claim 6, Nakamura et al. further discloses the source electrode as a focusing electrode (fig. 5, #15d).

9. Regarding claim 7, Nakamura et al. would necessarily have a variable potential (on and off).

10. Regarding claim 9, Nakamura et al. as modified above suggests an apparatus as rectied above.

However, Nakamura et al. does not disclose an electron beam source as a complete and separate sub-assembly of an imaging tube.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further incorporate the apparatus of Nakamura et al. as modified above with a separate sub-assembly, since constructing a formerly integral structure in various elements involves only routine skill in the art. One would be motivated to make such a modification to make it cheaper to fix a broken part.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. and Barrett as applied to claim 1 above, and further in view of Beland (US Patent 5241260).

Nakamura et al. as modified above suggests an apparatus as recited above. Nakamura et al. further discloses thermionic wire coil (fig. 6, #15a).

However, Nakamura et al. does not disclose tungsten.

Beland teaches tungsten (col. 1, lines 40-41).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Nakamura et al. as modified above with the tungsten of Beland, since one would be motivated to make such a modification for greater

emission intensity (col. 1, lines 43-46) as implied from Beland, due to tungsten's ability to maintain integrity at high temperatures. Also note that it would have been obvious to incorporate tungsten since it would have been within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

12. Claims 8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. and Barrett as applied to claim 1 above, and further in view of Matsushita et al. (US Patent 6526122).

Nakamura et al. as modified above suggests an apparatus as recited above. Nakamura et al. further discloses a grid (fig. 5, #15c) coupled within said source housing (fig. 5, section from #11 to #12) between the source electrode (fig. 5, #15b) and said target (fig. 5, #16a).

However, Nakamura et al. does not disclose a grid focusing electrons.

Matsushita et al. teaches a grid focusing electrons (col. 1, lines 18-21).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Nakamura et al. with the focusing grid of Matsushita et al., since one would be motivated to make such a modification to better obtain predetermined x-rays (col. 1, lines 28-31) as implied from Matsushita et al.

13. Claims 10, 12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Yamaguchi (JP 54-151384).

14. Regarding claim 10, Barrett discloses an apparatus (fig. 1) comprising a rotating target (fig. 1, #106) having a third voltage potential, which is characteristic of an anode (col. 6, line 28), and decelerating electrons to generate x-rays (col. 6, line 11), and a sealed (col. 5, lines 62-67) electron beam source (fig. 1, #50) external and separate from said target (fig. 1, #106) and separating a source interior (fig. 1, #64) from a low-pressure cavity containing said rotating target (fig. 1, #106) comprising a source housing (fig. 1, housing of #50) comprising a source window (fig. 1, #60) and a source electrode having a second voltage potential (fig. 1, #56) and generating electrons (col. 5, lines 61-62), said source electrode (fig. 1, #56) emitting said electrons (col. 5, lines 61-62) through said source window (fig. 1, #60) to said target (fig. 1, #106).

However, Barrett does not disclose a window having a voltage potential that is approximately equal to a voltage potential of a target.

Yamaguchi teaches a window (fig. 1, #21) having a voltage potential that is approximately equal to a voltage potential (abstract, constitution) of a target (fig. 1, #17).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Barrett with the voltage potentials of Yamaguchi, since one would be motivated to make such a modification for reducing discharge for more stable operation (abstract) as implied from Yamaguchi.

15. Regarding claim 12, Barrett further discloses a coolant channel housing (fig. 1, #68) thermally coupled (fig. 1, #64) to and at least partially defined by a source housing (fig. 1, #66)

comprising a coolant channel (fig. 1, #68) and a coolant flowing (col. 9, line 23) therein, said coolant absorbing heat from the source housing (fig. 1, #64 and 68).

16. Regarding claim 15, Barrett further discloses the beam source (fig. 1, #50) directed at the target (fig. 1, #106) at a glancing angle.

17. Regarding claim 16, Barrett would necessarily have a source window (fig. 1, #60) allowing direct electron emission to pass through said source window to said target (fig. 1, #106) and preventing indirect electron emission from passing through said source window (fig. 1, #60), since indirect electron emissions will have less kinetic energy and will not pass through the source window as easily compared to direct electron emissions having more kinetic energy.

18. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett and Yamaguchi as applied to claim 10 above, and further in view of Matsushita et al.

Barrett as modified above suggests an apparatus as recited above.

However, Barrett does not specifically disclose a frame coupled within a tube, a low-pressured cavity fluidically coupled between the frame and a target, said cavity at least partially defined by the frame, target, and sealed electron beam source, and said cavity at least partially exhausted or filled with a low-pressure gas comprising at least one of a low-Z substance, helium, nitrogen, or argon.

Matsushita et al. teaches a frame (fig. 1, #31) coupled within a tube (fig. 1, #1), a low-pressured cavity (fig. 1, cavity inside #31) fluidically coupled between the frame and a target

(fig. 1, #32), said cavity at least partially defined by the frame (fig. 1, #31), target (fig. 1, #32), and sealed electron beam source (fig. 1, #50), and said cavity at least partially exhausted (col. 6, lines 8-10) or filled with a low-pressure gas comprising at least one of a low-Z substance, helium, nitrogen, or argon.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Barrett as modified above with the cavity of Matsushita et al., since one would be motivated to make such a modification to produce a better x-ray beam due to the vacuum.

19. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Yamamura (US Patent 4188558).

20. Regarding claim 17, Barrett discloses a method comprising forming a source housing (fig. 1, housing of #50) over a source electrode (fig. 1, #56), sealing the source housing (col. 5, lines 62-67), generating and emitting electrons (col. 5, lines 61-62) from said source electrode (fig. 1, #56), and directing said electron through a source window (fig. 1, #60) to a target (fig. 1, #106).

However, Barrett does not disclose forming a cavity containing a source and a target and at least partially filling said cavity with a gas.

Yamamura teaches forming a cavity (fig. 1, cavity in #1) containing a source (fig. 1, #6) and a target (fig. 1, #5) and at least partially filling said cavity with a gas (abstract, and col. 1, lines 12-14).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Barrett with the pressured gas of Yamamura, since one would be motivated to make such a modification to reduce damage (col. 2, lines 62-64) as shown by Yamamura.

21. Regarding claim 18, Barrett would necessarily have a source window (fig. 1, #60) allowing direct electron emission to pass through said source window to said target (fig. 1, #106) and preventing indirect electron emission from passing through said source window (fig. 1, #60), since indirect electron emissions will have less kinetic energy and will not pass through the source window as easily compared to direct electron emissions having more kinetic energy.

22. Regarding claim 19, Barrett further discloses cooling (col. 9, line 23) said source housing (fig. 1, #64 and 68) via a coolant channel housing (fig. 1, #68).

23. Regarding claim 20, Barrett as modified above suggests a method as recited above.

However, Barrett does not disclose utilizing low pressure gas to enhance heat transfer between a target and frame of an imaging tube.

Yamamura further teaches utilizing low-pressure (abstract) gas to enhance heat transfer (col. 1, lines 12-14) between a target (fig. 1, #5) and frame (fig. 1, #1) of an imaging tube.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further incorporate the method of Barrett with the gas pressure of

Yamamura, since one would be motivated to make such a modification to reduce damage (col. 2, lines 62-64) as shown by Yamamura.

24. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. and Barrett as applied to claim 1 above, and further in view of Yamaguchi.

Nakamura et al. as modified above suggests an apparatus as recited above.

However, Nakamura et al. does not disclose a window having a voltage potential that is approximately equal to a voltage potential of a target.

Yamaguchi teaches a window (fig. 1, #21) having a voltage potential that is approximately equal to a voltage potential (abstract, constitution) of a target (fig. 1, #17).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Nakamura et al. as modified above with the voltage potentials of Yamaguchi, since one would be motivated to make such a modification for reducing discharge for more stable operation (abstract) as implied from Yamaguchi.

25. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett and Yamaguchi as applied to claim 10 above, and further in view of Koller (US Patent 6438208).

Barrett as modified above suggests an apparatus as recited above.

However, Barrett does not disclose a frame, an x-ray window coupled to said frame, and a coolant channel housing comprising coolant channels coupled to said frame and cooling said x-ray window.

Koller teaches a frame (fig. 1, #104), an x-ray window (fig. 1, #200) coupled to said frame (fig. 1, #104), and a coolant channel housing (fig. 1, #310) comprising coolant channels (fig. 2, #308) coupled to said frame (fig. 1, #104) and cooling said x-ray window (col. 6, lines 15-30).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Barrett as modified above with the coolant of Koller, since one would be motivated to make such a modification for minimizing thermal stress and strain (col. 2, lines 43-46) as implied from Koller.

26. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett, Yamaguchi, and Koller as applied to claim 23 above, and further in view of Richardson (US Patent 6529579).

Barrett as modified above suggests an apparatus as recited above. Barrett further discloses wherein said source window (fig. 1, #60) comprises feedthroughs (fig. 1, #68).

However, Barrett does not disclose wherein coolant cooling an x-ray window are fluidically coupled to feedthroughs.

Richardson teaches wherein coolant (fig. 2, #302) cooling an x-ray window (fig. 1, #112) are fluidically coupled to feedthroughs (fig. 2, #506).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Barrett as modified above with the fluidically coupled coolant of Richardson, since one would be motivated to make such a

modification for removing excessive heat more effectively and efficiently (col. 3, lines 35-40) as implied from Richardson.

Response to Arguments

27. Applicant's arguments with respect to claims 1, 2, 4-10, and 12-24 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments filed 5/18/05 have been fully considered but they are not persuasive.

28. Regarding claim 1, Applicants argue that Nakamura et al. does not disclose an apparatus that has a source housing with a source window and a source electrode that emits electrons through the source window. Applicants further argue that the item number 12 is an envelope, not a window. Applicants further argue that the electrons from the cathode appear to pass through an aperture or hole, not through a window. The Examiner disagrees. As seen in figure 5, Nakamura et al. does disclose a source housing with a source window (fig. 5, #12) and a source electrode (fig. 5, #15) that emits electrons to the target (fig. 5, #16), regardless if there is a hole or aperture, since windows can have holes or apertures. Therefore, Nakamura does disclose an apparatus that has a source housing (fig. 5, section from #11 to #12) with a source window (fig. 5, #12) and a source electrode (fig. 5, #15) that emits electrons through the source window.

Regarding claim 4, Applicants argue that Nakamura et al. does not teach or suggest the additional limitations of claim 4. The Examiner disagrees. Nakamura et al. would necessarily have a source window (fig. 5, #12) allowing direct electron emission to pass through said source window to said target (fig. 5, #16a) and preventing indirect electron emission from passing

through said source window (fig. 5, #12), since indirect electron emissions will have less kinetic energy and will not pass through the source window as easily compared to direct electron emissions having more kinetic energy. Therefore, Nakamura et al. does teach or suggest the additional limitations of claim 4.

Regarding claim 6, Applicants argue that Nakamura et al. does not disclose a source electrode that is a focusing electrode. The Examiner disagrees. Nakamura et al. does disclose a source electrode that is a focusing electrode (fig. 5, #15d), since the focusing electrode is considered part of the source electrode. Therefore Nakamura et al. does disclose a source electrode that is a focusing electrode (fig. 5, #15d).

Regarding claim 7, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., potential variability referring to the ability to alter the voltage potential of a device during the operation thereof) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Regarding claims 13 and 14, Applicants argues that Matsushita et al. does not teach or suggest the limitations on the grounds that Matsushita et al. evacuates both interiors. The Examiner disagrees. The use of the transitional term "comprising", an inclusive or open-ended term, does not exclude additional, unrecited elements or method steps. As such, the claim is not limited to evacuating both interiors. Therefore, Matsushita et al. does teach or suggest limitations in claims 13 and 14.

Regarding claims 2 and 12, Applicants argue that the coolant housing of Barrett is not defined by the source housing. The Examiner disagrees. The coolant housing (fig. 1, #68) is

defined by adjacent cooling surfaces (fig. 1, #58 and 66), which are part of the source housing. Therefore, Barrett does disclose coolant housing (fig. 1, #68) defined by the source housing (fig. 1, #58 and 66).

Applicants further argue that the coolant housing (fig. 1, #68) of Barrett does not absorb heat from a source housing. The Examiner disagrees. The coolant housing (fig.1, #68) absorbs heat from the aperture shield (fig. 1, #58), which is part of the source housing. Therefore, Barrett does disclose the coolant housing (fig. 1, #68) absorbing heat from a source housing (fig. 1, #58).

Regarding the limitations of claim 3, which are not included in claim 1, Applicants argue that Barrett does not disclose an electron source window. The Examiner disagrees. The aperture shield (fig. 1, #58) is part of the electron source window, which electrons traverse through. Therefore, Barrett does teach an electron source window (fig. 1, #58) that includes feedthroughs (fig. 1, #68).

Regarding claim 20, Applicants argue that Yamamura does not disclose a gas to enhance heat transfer between a target and a frame. The Examiner disagrees. By incorporating gas (fig. 1, #8) for cooling heat generated around the target (fig. 1, #5), the gas draws heat away from the frame (fig. 1, #1), which allows more heat to transfer from the target (fig. 1, #1) to the frame (fig. 1, #5), thereby effectively enhancing heat transfer between the target (fig. 1, #5) and frame (fig. 1, #1). Therefore, Yamamura does disclose a gas (fig. 1, #8) to enhance heat transfer between a target (fig. 1, #5) and a frame (fig. 1, #1).

In conclusion, Applicants arguments are not persuasive, and the prior art remains applicable.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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